

Snohomish County
Planning and Development
Services

## Assistance Bulletin

#66

Revised March 2015

**Keyword: Assistance Bulletins** 

# Filling of Roadside Ditches

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ONLINE INFORMATION www.snohomishcountywa.gov/1190



This Assistance Bulletin only applies to property within unincorporated Snohomish County and does not apply to property within incorporated city limits.

**Q:** I'd like to fill in the ditch in the County right-of-way so I can widen the driveway in front of my house. Am I allowed to do that?

**A:** That depends on several factors, including the slope of the existing ditch. According to the 2003 Engineering Development & Design Standards (EDDS), open channel conveyance systems (ditches) with slopes of 5 percent or less must be open and vegetation-lined. If you want to fill in such a ditch, you must apply for a special deviation from the EDDS (see next question).

Ditches with slopes between 5 and 9 percent may be filled and converted to underground culverts if you follow the proper procedures (see below). If left open, the ditches must be either vegetation-lined or rock-lined to control velocities and reduce erosion. The County Engineer may require use of a standard rock-lined ditch or a closed (pipe) drainage system under a paved shoulder with asphalt thickened edge or turnpike shoulder under certain circumstances. See Standard Drawing 5-010 in the online EDDS at www.snohomishcountywa.gov/492.

If the channel slope exceeds 9-percent, the ditch must be filled unless an alternative is designed by a professional civil engineer and approved by the County Engineer.

Q: Why do I need a permit to fill in a ditch in the right-of-way?

**A:** All grading within the County right-of-way requires a right-of-way permit. Once an application is received, an initial site inspection sets the conditions for the work allowed, as well as advising the required materials to be used.

**Q:** Why can't I just fill the ditch and replace it with a pipe?

**A:** Because vegetation in ditches provides water quality and protect habitat for threatened or endangered species such as bull trout and Chinook salmon.

Q: Under what circumstances am I allowed to fill my ditch?

**A:** If it can be demonstrated that the filling of your ditch will not impact downstream critical areas such as wetlands or streams. This can be done by showing there is water quality treatment such as a detention and biofiltration pond between your ditch and the critical area.

This bulletin is intended only as an information guide. The information may not be complete and is subject to change. For complete legal information, refer to Snohomish County Code.

## Q: Whom should I contact to submit a deviation request?

**A:** A deviation request will be part of the initial application submittal to Planning and Development Services (PDS) requesting to enclose the ditch. PDS will then refer the application and deviation to the Chief Engineering Officer for PDS for review.

Q: How long does it take?

**A:** About three weeks.

Q: If my deviation request is denied, can I seek an appeal?

**A:** Yes, by submitting a letter of appeal to the Chief Engineering Officer of PDS, along with additional justification demonstrating how you have met the criteria in this bulletin.

Q: How long does the appeal process take?

**A:** About three weeks.

Q: How much does all this cost?

**A:** The fee is included with the fee paid for the enclosure permit.

Q: Does it make any difference if there are wetlands on my property?

**A:** Perhaps. If there are streams, wetlands or other environmentally sensitive areas in the immediate vicinity, it may be necessary to provide mitigation for impacting a wetland or stream. This will be determined after initial review and will be referred to a biologist.

Q: What's the best way to fill in the ditch?

**A:** The ditch must be filled in accordance with the EDDS (see illustration, or go to the EDDS website listed above). Typically, this means 6 inches of bedding below the pipe, 12 inches of bedding around the pipe and 12 inches of bedding covering the pipe. A shallow, grass-lined swale should lie on top of the installation to prevent stormwater from collecting in the roadway.

Q: What size and type of materials should I use?

**A:** You should use pipe of like materials to those of adjoining properties. Minimum pipe diameter is 12 inches, but may need to be larger for ditches that convey larger flows. (See illustration.) Upon receipt of the application and site plan, specific materials and requirements will be determined at an initial site visit.

Q: Do I need to connect to existing culverts in the neighborhood?

**A:** Yes. Connections should be of like materials to those of adjoining properties. Pipe ends must be beveled in accordance with EDDS 5-050. (See illustration.)

Q: What if the adjoining properties have dissimilar materials?

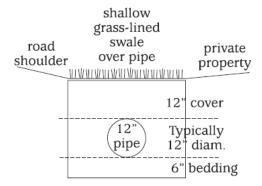
**A:** A catchbasin is required to join pipes of dissimilar materials. The catchbasin must be installed at the downstream end of your property to collect swale water. (See illustration or see Standard Illustration 5-060 on the EDDS website.)

## Q: What if there are no other culverts or ditches to connect to?

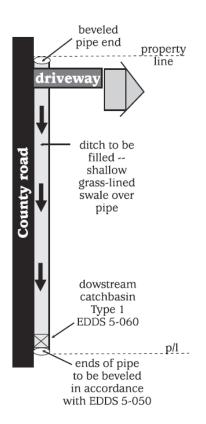
**A:** Couplings without catchbasins can be used for like materials. For information on how pipe ends should be beveled, see EDDS Standard Drawings 5-040 and 5-050.

#### Q: Whom should I call for more information?

**A:** Contact Shawn Toevs, PDS, at 425-388-3385, or email her at <u>s.toevs@co.snohomish.wa.us</u>.



Pipe diameter must be at least 12" for light flow but may need to be larger for ditches that convey larger flows.



### **Glossary of Terms**

**catchbasin**—A reservoir for collecting surface drainage or run-off.

**culvert**—A drain or conduit, not incorporated in a closed system, that carries drainage water under a driveway, roadway, railroad, pedestrian walk or public way.

**mitigation**—Measures taken to reduce adverse impacts on the environment.

**right-of-way**—A strip of land platted, dedicated, condemned, established by prescription or otherwise legally established for the use of pedestrians, vehicles or utilities.

**swale**—A shallow, vegetation-lined ditch.

wetlands—An area that is saturated by surface or ground water with vegetation adapted for life under those soil conditions, as swamps, bogs, fens, marshes, and estuaries.